Report on Plans and Priorities

Natural Sciences and Engineering Research Council

2015-16

The Honourable James Moore P.C. MP
Minister of Industry

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Catalogue Number: NS1-21/2014E-PDF

ISSN 2292-3098

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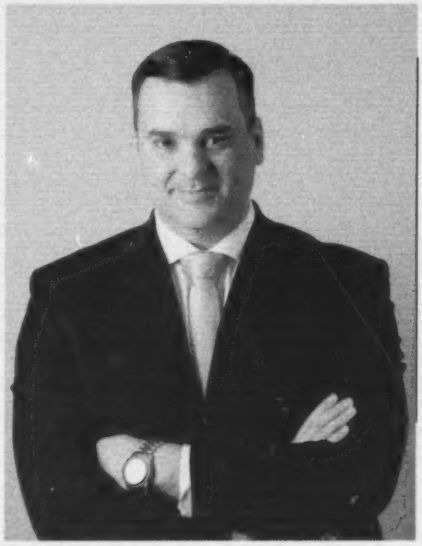
Minister's Message



Canada will continue to benefit from responsible economic policies in 2015–16, including our low taxes, free trade opportunities and responsible investment regime.

The Industry Portfolio will help sustain job creation and economic growth by effectively managing programs and services that help Canadian companies compete and innovate. Canadians can depend on our government to invest in programs that benefit them the most. In 2015–16, the Industry Portfolio will continue to invest in world-class research and innovation that help companies compete at home and abroad.

Through its implementation of *Seizing Canada's Moment: Moving Forward in Science, Technology and Innovation 2014, the Portfolio is* encouraging collaborative partnerships between educational institutions and industry leaders that support research and commercialization.

In 2015–16, the Natural Sciences and Engineering Research Council of Canada (NSERC) will focus on mechanisms for supporting world-class discovery research and innovation, both integral to promoting R&D growth in Canada. This research promotes a strong economy and contributes to job creation. NSERC will continue to find innovative ways for Canadian companies to maximize access to post-secondary research and training.

The Industry Portfolio will help deliver on our government's commitment to return to a balanced budget by managing programs and services effectively. I am confident that we will meet our objective and that the Natural Sciences and Engineering Research Council will continue to contribute toward economic growth and prosperity that benefit all Canadians.

James Moore

Minister of Industry

Minister of State's Message

As Minister of State for Science and Technology, I am pleased to present the *2015–16 Report on Plans and Priorities for the Natural Sciences and Engineering Research Council*.

Our government has been integral in supporting basic and applied research, talent development, research infrastructure and innovation-related activities in the private sector with $11 billion in new federal funding since 2006.

I'm proud to say that as a result of this strong commitment, Canada tops the G7 in higher education research and development investments at our universities, colleges and research institutes. In recognition of the critical economic and social impact science has on Canadians, the government unveiled an updated strategy, *Seizing Canada's Moment: Moving Forward in Science, Technology and Innovation 2014*. The strategy is a vision and a road map for strengthening Canada's position as a global leader in scientific research while looking to harness greater Canadian innovations that create jobs, increase prosperity and improve the quality of life of Canadians.

In 2015–16, the Natural Sciences and Engineering Research Council of Canada (NSERC) will continue to engage the country's renowned academic research community in contributing to a stronger and more prosperous Canada by building a competitive research base. In an increasingly competitive global economy, NSERC will work with the research community to expand Canada's knowledge-based economy through investments that will give scientists and engineers the tools they need to push the boundaries of scientific research. NSERC will continue to provide students and graduates with training to build the necessary skills to secure Canada's competitive advantage today and in the future.

Moving forward, Canada will work hard to develop and attract high-quality researchers, both at home and abroad, to enrich our scientific enterprise and create greater prosperity for Canadians. Furthermore, we will continue to encourage collaborative partnerships and to enhance programs that support commercialization and knowledge transfer between higher education institutions and industry.

With a new strategy in place and a government firmly committed to innovation, our country is poised for another outstanding year. In 2015–16, we will work with all of our stakeholders to meet the objectives outlined in this report.

Ed Holder
Minister of State (Science and Technology)

Section I: Organizational Expenditure Overview

Organizational Profile

Appropriate Minister: The Honourable James Moore, Minister of Industry

The Honourable Ed Holder, Minister of State (Science and Technology)

Institutional Head: Dr. B. Mario Pinto (President)

Ministerial Portfolio: Industry

Enabling Instrument(s): *Natural Sciences and Engineering Research Council Act*[i]

Year of Incorporation / Commencement: May 1, 1978

Organizational Context

Raison d'être

The Natural Sciences and Engineering Research Council of Canada (NSERC) is a key factor in making Canada a leading country of discovery and innovation. NSERC aims to maximize the value of public investments in research and development (R&D) and to advance the prosperity and quality of life of all Canadians.

In today's highly competitive global economy, NSERC plays a central role in supporting Canada's innovation ecosystem. NSERC supports research that benefits all Canadians. By connecting this innovative research to industry through its partnership initiatives, NSERC also makes it easier for the private sector to collaborate with academia and access the wealth of resources Canada's first-rate academic system has to offer.

Canada's future discoverers and innovators can realize their full potential with the support of NSERC's scholarships and fellowships programs, along with funding provided through discovery and partnership awards.

NSERC is also actively working to enhance the profile of Canadian research through national and international promotional activities and by connecting with industry.

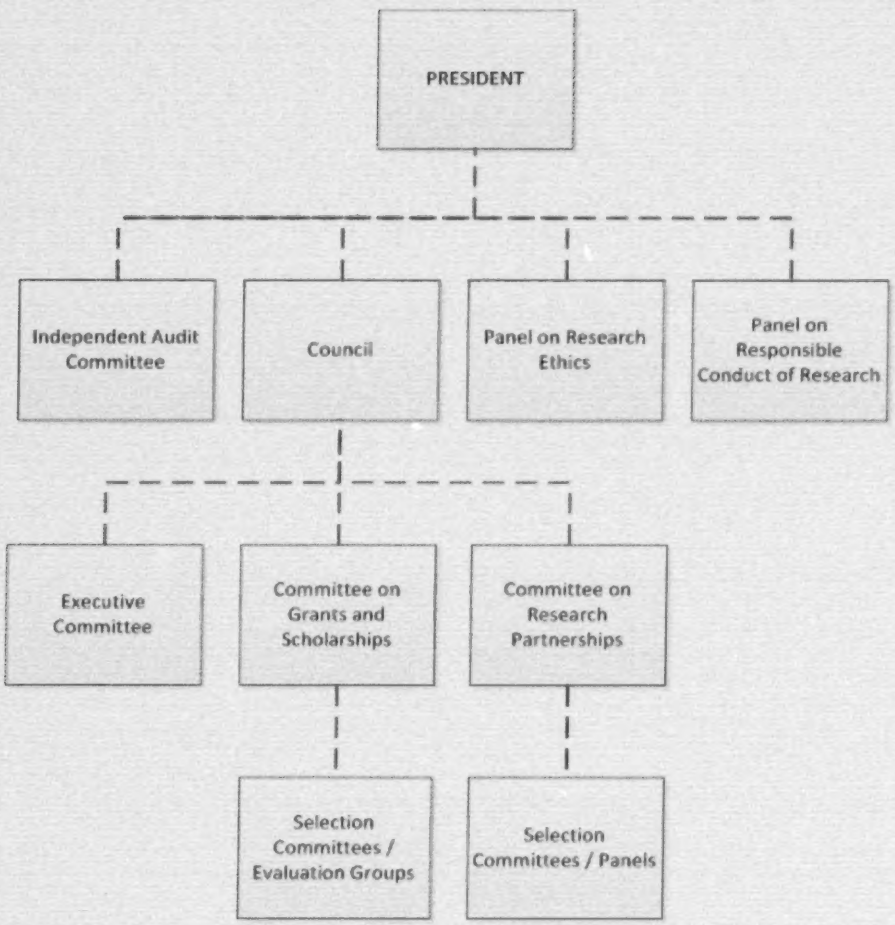
Responsibilities

NSERC is a departmental corporation of the Government of Canada created in 1978. It is funded directly by Parliament and reports to it through the Minister of Industry. NSERC's Council is composed of a President and up to 18 other distinguished members selected from the private and public sectors. NSERC's President is the Chief Executive Officer. The elected Vice-President is the Chair of the Council and of its Executive Committee. NSERC's Council is advised on policy matters by various standing committees. Funding decisions are made by the President, or designate, on the basis of recommendations made by peer review committees. The functions of NSERC, based on the authority and responsibility assigned to it under the Natural Sciences and Engineering Research Council Act (1976-1977, c.24), are to:

- promote and assist research in the natural sciences and engineering, other than the health sciences; and
- advise the Minister in respect of such matters relating to such research as the Minister may refer to the Council for its consideration.

NSERC supports more than 11,000 of the most creative and productive Canadian university professors, over 30,000 highly qualified postgraduate students and fellows, and partners with more than 3,000 Canadian firms to transfer knowledge that creates economic wealth.

NSERC Governance Structure



Strategic Outcome and Program Alignment Architecture

1 Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

- **1.1 People: Research, Talent**
  - **1.1.1** Science and Engineering Promotion
  - **1.1.2** Scholarships and Fellowships
  - **1.1.3** Alexander Graham Bell Canada Graduate Scholarships*
  - **1.1.4** Vanier Canada Graduate Scholarships*
  - **1.1.5** Banting Postdoctoral Fellowships*
  - **1.1.6** Canada Research Chairs*
  - **1.1.7** Canada Excellence Research Chairs*
- **1.2 Discovery: Advancement of Knowledge**
  - **1.2.1** Discovery Research
  - **1.2.2** Research Equipment and Resources
- **1.3 Innovation: Research Partnerships**
  - **1.3.1** Research in Strategic Areas
  - **1.3.2** Industry-driven Collaborative Research and Development
  - **1.3.3** Networks of Centres of Excellence*
  - **1.3.4** Training in Industry*
  - **1.3.5** Commercialization of Research*
  - **1.3.6** College and Community Innovation
- **1.4 Internal Services**

*Programs involving more than one granting agency.

Organizational Priorities

Organizational Priorities

Priority	Type[1]	Strategic Outcome
People Advantage	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

Description

Why is this a priority?

An innovative and competitive society relies on the creativity and skills of highly trained people. It is critical that the next generation of Canadians have the necessary skills in science and technology, to meet the demands of today's global realities.

NSERC contributes to building a stronger culture of science, technology and innovation in Canada by providing university students and fellows support for research training, timely completion of degree and by providing opportunities for students and fellows to train in a variety of research environments that help them develop professional, job-ready skills for their future careers. Also, NSERC invests in science promotion initiatives directed to youth, women and aboriginal populations to break down barriers to their participation in science and technology related careers.

What are the plans for meeting this priority?

- NSERC will continue to offer globally competitive scholarships and fellowships which foster a high level of scientific excellence in Canada and enhance Canada's reputation as a magnet for talent. To ensure that NSERC's scholarships and fellowships remain relevant and effective, NSERC will position these programs, as well as other training initiatives, so that they are in line with the emerging realities of the job market. NSERC will continue to regularly monitor and evaluate program performance.
- To increase gender equity in science and engineering, NSERC will continue to develop plans, in collaboration with key partners, to promote the participation of women as students,

1. Type is defined as follows: previously committed to—committed to in the first or second fiscal year prior to the subject year of the report; ongoing—committed to at least three fiscal years prior to the subject year of the report; and new—newly committed to in the reporting year of the RPP or DPR.

professionals, and leaders and will implement policy and program changes resulting from Tri-Agency harmonization efforts and international best practices.

- In 2015-16, NSERC will continue the development of highly qualified personnel who are "marketplace-ready" and can make immediate contributions after graduation by providing enhanced opportunities to develop technical and professional skills and to experience enriched and varied research environments. NSERC will also formally evaluate the programs that contribute to this priority.
- In 2015-16, NSERC will finalize the development of its strategic plan, entitled NSERC 2020. This strategy will include work to develop policy directions and specific actions to enhance support for the next generation of researchers and innovators. This exercise will ensure that NSERC's training initiatives are relevant and in line with the realities of today's job market and with global trends.
- Expand activities for the promotion of science to youth and other stakeholders to enhance the science culture in Canada.

Priority	Type	Strategic Outcome
Knowledge Advantage	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

Description

Why is this a priority?

To further position Canada as a hub of knowledge and discovery, Canada must build upon research and engineering strengths, generate new ideas and innovations, and achieve excellence by global standards.

NSERC sustains Canada's capacity to conduct world-class research in the broad areas of natural sciences and engineering by supporting scientific excellence, by seeding the creativity that drives innovation, and by supporting Canadian researchers so they can be global leaders and key players in international research collaborations. NSERC's Discovery Grants Program supports ongoing programs of research, trains students and postdoctoral fellows and recognizes the creativity and innovation that are at the heart of all research advances.

What are the plans for meeting this priority?

- The Government of Canada's Economic Action Plan 2014 announced the creation of the Canada First Research Excellence Fund. The Fund will invest $50 million dollars in 2015-16, with investment ramping up by $50 million a year until 2018. By 2018-2019, the Fund will invest $200 million per year to support Canada's postsecondary institutions in their efforts to become global research leaders. It will be administered by the Social Sciences and Humanities Research Council (SSHRC) on behalf of NSERC, SSHRC and the Canadian Institutes of Health Research (CIHR). The Fund will be competitively allocated, based on peer review, with funding allocated to NSERC following each competition should any awards align with NSERC's mandate.
- NSERC will continue to promote and maintain a diversified base of high-quality research capability.
- NSERC will continue to support advanced research and the development of early stage researchers through the Discovery Grants Program. NSERC will continue to implement recommendations from the recent program evaluation, in order to ensure it is operating effectively.
- NSERC will continue to optimize its support of discovery research through refinements to its policies and programs. This includes work towards new and enhanced mechanisms designed

to increase efficiency and reduce administrative workload. NSERC will explore changes to the method of allocating funds for discovery research in order to ensure that the sub-program remains effective and that the budget is used responsibly and optimally.

- In 2015-16, NSERC will continue to work with SSHRC and CIHR to implement the Tri-Agency Open Access Policy on publications. NSERC will also participate in implementing the *Action Plan on Open Government 2014-16* through a set of specific activities and milestones as a part of its commitments to the *Open Science Implementation Plan.*
- NSERC will continue to support the involvement of Canadian researchers and students in international collaborations by focusing participation and engagement on initiatives and partnerships aligned with NSERC's strategic objectives.
- NSERC will continue its work to clarify its mandate as it relates to health research, and ensure consistent interpretation across programs and agencies.
- In 2015-16, NSERC will award grants in the 3rd instalment of *Discovery Frontiers* on the theme of New Materials for Clean Energy and Energy Efficiency.

Priority	Type	Strategic Outcome
Innovation Advantage	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

Description

Why is this a priority?

Private sector innovation is integral to improving productivity and sustaining long-term economic prosperity in an increasingly competitive global marketplace. To remain competitive in today's global economy, Canada must ensure that postsecondary research strengths are able to respond to future increases in demands for technological innovation from the private sector. This aligns with the Innovation Pillar of the Government of Canada's 2014 Science, Technology and Innovation Strategy that states: "We will help bring new ideas and knowledge to market by stimulating more demand for innovation from firms of all sizes and influencing more innovation-focused business strategies."

NSERC will continue to help connect businesses to partners in the innovation system by making Canada's world-class research infrastructure, expertise and researchers available to them. These collaborative R&D partnerships provide an excellent experiential training environment for students to gain skills by working with business.

What are the plans for meeting this priority?

- In 2015-16, NSERC will focus on increasing the impact of its industry-driven program to foster business innovation. This focus will include the integration of similar grants and increased client services to streamline access to programs that support business.
- NSERC will aim to centralize access by businesses to the academic community by forming partnerships with other organizations. This includes organizations such as other government departments (e.g. National Research Council, Natural Resources Canada), industry associations (e.g. Consortium for Aerospace Research and Innovation), and non-profit organizations (e.g. Mitacs). This activity will allow businesses to build synergies with Canada's R&D capacity in a more seamless manner.
- In 2015-16, NSERC's Strategy for Partnerships and Innovation will be refreshed following a successful first five years of the strategy. Planning for the renewed strategy will be part of the broader NSERC 2020 strategy after consultation with the business and academic communities. This will be followed by the development of goals and an implementation plan

for an anticipated launch by the end of the fiscal year.

- To better measure impacts of NSERC partnership grants, an online reporting system for companies who have participated in NSERC funded projects will be implemented. This initiative will also provide an opportunity to harmonize performance measurement across all NSERC partnership grants.
- Following the update to the Science, Technology and Innovation strategy released in December 2014, NSERC will realign its Strategic Partnerships grants to Canada's Science Technology & Innovation priority areas.

Priority	Type	Strategic Outcome
Accountability	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

Description

Why is this a priority?

NSERC is committed to ensuring and demonstrating that the results of its investments in Canadian research and training are of benefit to Canadians.

NSERC is taking a proactive stance to demonstrate its stewardship in the management of Canada's investments in natural sciences and engineering by measuring and reporting on the results and impacts of its programs, finding efficiencies, working with other departments and agencies, and promoting a culture of business excellence within the organization.

What are the plans for meeting this priority?

- NSERC will continue to advance a culture of business excellence in the delivery of its services and its enabling infrastructure in order to optimize operational effectiveness and improve client services.
- In 2015-16, NSERC will continue to generate, disseminate, and publish performance data in a timely and informative matter in accessible and open formats where possible.
- NSERC will continue with SSHRC to develop the Research Portal, a grants management system, in order to simplify the application process by providing a single point of access for applicants, reviewers, committee members, institutions and partners.
- NSERC will continue to conduct regularly scheduled audits of its operations and management to ensure efficiency and accountability. Whenever appropriate, the Corporate Internal Audit Division will conduct follow up audits to ensure recommended measures have been taken.

Priority	Type	Strategic Outcome
Visibility	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

Description

Why is this a priority?

Showcasing and promoting the accomplishments of Canadian researchers allows NSERC to demonstrate the value and social and economic benefits of the federal government's investments in science, technology and innovation. Promoting Canadian research increases the dissemination and application of cutting edge Canadian knowledge and research worldwide.

What are the plans for meeting this priority?

- NSERC will continue to work with like-minded organizations and those that have similar objectives to leverage resources and find efficiencies.
- In 2015-16, NSERC will continue to leverage relationships with partners from the academic and business communities, as well as from key government departments. In addition, NSERC will establish new ways to connect with industry and key opinion leaders in Canada.
- NSERC will also continue to be responsive and engage the Canadian research community to facilitate two-way dialogue and consultation.

Risk Analysis

NSERC's strategic and operational priorities are managed and monitored according to NSERC's Corporate Risk Profile. Based on an annual review of corporate risk, three areas have been identified as priorities for risk mitigation in 2015-16.

Key Risks

Risk	Risk Response Strategy	Link to Program Alignment Architecture
Research Portal Business Transformation The organization might not be able to take advantage of opportunities to transform its business that are made available through the Research Portal project if the project exceeds its planned costs and/or timelines.	NSERC, together with SSHRC, will strengthen the governance and oversight of the Research Portal business transformation project, which includes the Common Curriculum Vitae (CCV), modernization of NSERC processes, and communication to stakeholders.	S.O.1 Expected results of all program activities depend on the successful implementation of new technologies and the associated business transformations and communications with stakeholders (internal and external).
Organizational Evolution The changing landscape of support for research and innovation will complicate NSERC's ability to assume a leadership role as the facilitator for Canada's investments in science, technology and innovation.	NSERC's upcoming strategic plan "NSERC 2020" will serve as a framework for the organization's future vision and goals. NSERC 2020 will be aligned with the Government's updated Strategy for Science, Technology and Innovation and will be based on broad consultations with external stakeholders and NSERC management and staff.	
Government-Wide Requirements NSERC will need to adapt to upcoming changes as a result of Government of Canada priorities, in addition to maintaining current business.	NSERC will monitor existing controls and strategies to ensure effective management of systems, processes and assets as it transitions to Government-wide platforms and policies.	

Planned Expenditures

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$1,086,570,325	$1,086,570,325	$1,084,750,009	$1,064,260,465

Human Resources (Full-Time Equivalents [FTEs])

2015–16	2016–17	2017–18
389	389	389

Budgetary Planning Summary for Strategic Outcome and Programs* (dollars)

Strategic Outcome, Programs and Internal Services	2012–13 Expenditures	2013–14 Expenditures	2014–15 Forecast Spending	2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
Strategic Outcome 1: Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.							
People: Research Talent	$271,422,544	$268,221,394	$281,330,469	$287,240,355	$287,316,237	$287,460,422	$276,476,613
Discovery: Advancement of Knowledge	$430,509,978	$404,299,452	$407,065,663	$403,233,837	$403,374,332	$402,680,789	$397,795,835
Innovation: Research Partnerships	$346,895,745	$370,061,947	$374,630,290	$371,949,620	$372,473,817	$371,237,543	$367,335,149
Strategic Outcome 1 Subtotal	$1,048,828,267	$1,042,582,793	$1,063,026,422	$1,062,423,812	$1,063,164,386	$1,061,378,754	$1,041,607,597
Internal Services Subtotal	$27,152,242	$24,096,237	$26,183,023	$24,146,513	$23,405,939	$23,371,255	$22,652,868
Total	$1,075,980,509	$1,066,679,030	$1,089,209,445	$1,086,570,325	$1,086,570,325	$1,084,750,009	$1,064,260,465

*Planned spending does not reflect all budget decisions or new investments beginning in 2015-16 for the Canada First Research Excellence Fund, as announced in Canada's Economic Action Plan 2014.

Alignment of Spending With the Whole-of-Government Framework

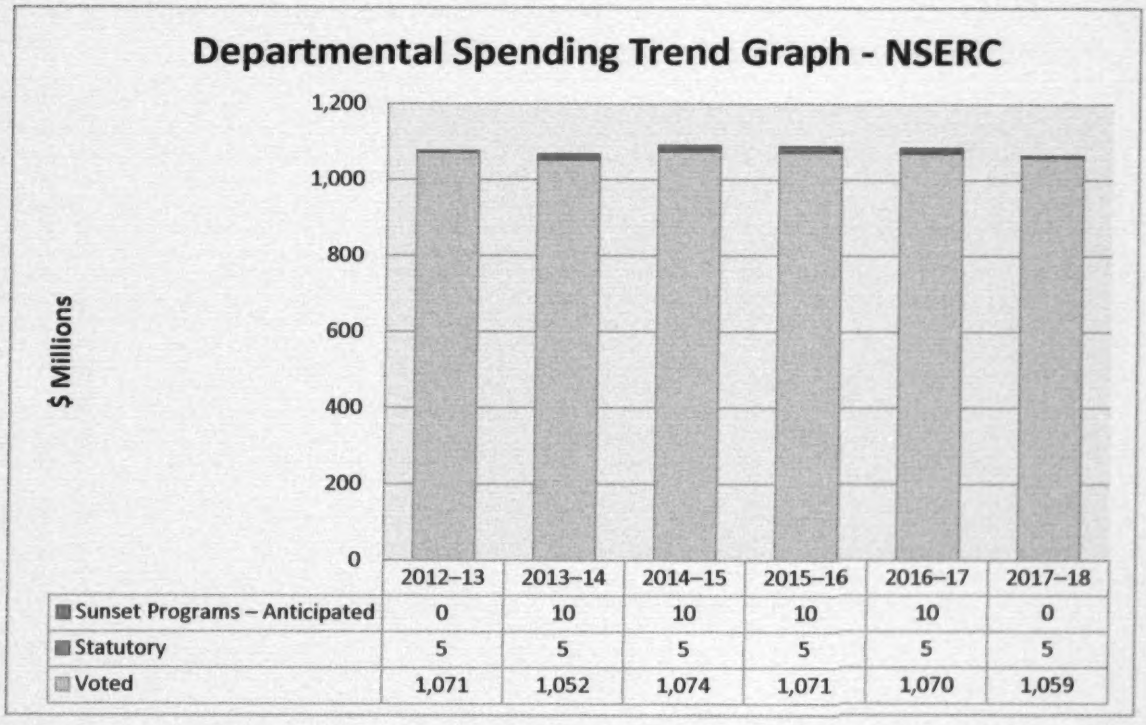
Alignment of 2015–16 Planned Spending With the Whole-of-Government Framework[ii] (dollars)

Strategic Outcome	Program	Spending Area	Government of Canada Outcome	2015–16 Planned Spending
Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.	1.1 People	Economic Affairs	An innovative and knowledge based economy.	$287,316,237
	1.2 Discovery	Economic Affairs	An innovative and knowledge based economy.	$403,374,332
	1.3 Innovation	Economic Affairs	An innovative and knowledge based economy.	$372,473,817

Total Spending by Spending Area (dollars)

Spending Area	Total Planned Spending
Economic affairs	$1,086,570,325
Social affairs	N/A
International affairs	N/A
Government affairs	N/A

Departmental Spending Trend



	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18
Sunset Programs – Anticipated	0	10	10	10	10	0
Statutory	5	5	5	5	5	5
Voted	1,071	1,052	1,074	1,071	1,070	1,059

Estimates by Vote

For information on the Natural Sciences and Engineering Research Council's organizational appropriations, consult the *2015–16 Main Estimates* on the Treasury Board of Canada Secretariat website.[iii]

Section II: Analysis of Programs by Strategic Outcome

Strategic Outcome:

Canada is a world leader in advancing, connecting and applying new knowledge in the natural sciences and engineering.

Program 1.1: *People: Research Talent*

Description

This Program supports the attraction, retention and development of highly qualified people in the natural sciences and engineering in Canada through Chairs programs, fellowships, scholarships and stipends. These activities are essential to building the human capital required to enable a strong, globally competitive research and innovation system in Canada. Researchers, students and young people benefit from the grant funding which supports postsecondary university research as well as some outreach activities at universities, museums, science centres, and community based organizations.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$287,240,355	$287,316,237	$287,460,422	$276,476,613

Human Resources (Full-Time Equivalents [FTEs])

2015–16	2016–17	2017–18
36	36	36

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Canada's workforce has the required talented and skilled researchers in natural sciences and engineering	Total researchers per thousand employed	8.3	March 31 2016
	Percentage difference in unemployment rate for occupations in the natural sciences and engineering vs. national unemployment rate.	1%	
	Number of earned doctoral degrees in the natural sciences and engineering per capita	15th	

Planning Highlights

- As part of the NSERC 2020 initiative, the agency will work to develop policy directions and specific actions to enhance support for the next generation of researchers and innovators. The strategy will ensure that the positioning of NSERC's training initiatives is in accordance with today's emerging job market and global S&T trends.
- NSERC will continue to work with SSHRC and CIHR to harmonize the agencies' policies on women in science. In 2015-16, NSERC will finalize an action plan with respect to the promotion and retention of women in science and engineering. The agencies will develop policies based on stakeholder consultations and international best practices to advance gender considerations in research and training.
- In 2015-16, NSERC will continue to support the development of highly qualified personnel who are "marketplace-ready" in natural sciences and engineering through the Collaborative Research and Training Experience program (CREATE). The program provides enhanced opportunities for students to develop technical and professional skills, and to gain experience in enriched and varied research environments. Close to half of the 105 active training programs feature a formal link with industry. NSERC will also evaluate the CREATE program in 2015.

Sub-Program 1.1.1: *Science and Engineering Promotion*

Description

This Sub Program stimulates the public's interest in science, math, and engineering and encourages the next generation of students to consider careers in these fields, helping to ensure that Canada has an ongoing supply of future discoverers and innovators. These activities are necessary as Canada has fewer university students enrolled in the natural sciences and engineering disciplines and fewer doctoral students graduating and working in these fields, relative to most Organization for Economic Cooperation and Development countries. NSERC awards grants to support activities of community based organizations, museums, science centres and universities that stimulate the interest of young people and students and improve school performance in science and mathematics, notably groups that are underrepresented in the natural sciences and engineering, such as women and Aboriginals. In addition, NSERC offers several prizes that recognize and highlight Canadian achievements in training, research, and innovation. This sub program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$6,648,065	$6,647,475	$6,635,258

Human Resources (FTEs)

2015–16	2016–17	2017–18
5	5	5

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The next generation of university students select the natural sciences and engineering as a field of study	Percentage growth in bachelor's enrolment in the NSE at Canadian universities.	1%	March 31 2016
	Percentage of science promotion projects that successfully complete the planned activity.	80%	

Planning Highlights

- In 2015-16, the PromoScience program will hold a competition to award between 30 and 50 multi-year grants, anticipated to be selected from among over 100 requests. Annual competitions enable NSERC to maintain a complement of over 125 active PromoScience grants that support outreach activities aimed at youth and under-represented groups.
- NSERC will continue to honour Canada's top researchers by awarding prestigious prizes, including the Gerhard Herzberg Canada Gold Medal for Science and Engineering. These prizes celebrate the talent fostered by NSERC through students and seasoned researchers, in addition to their contributions and impacts in their fields and on Canadians.
- In 2015-16, in response to the updated federal Science, Technology and Innovation Strategy, NSERC will work to develop new ways to promote science to youth and other stakeholders to enhance the science culture in Canada.

Sub-Program 1.1.2: *Scholarships and Fellowships*

Description

This Sub Program supports a significant number of students at various stages of their university studies. At the undergraduate level, support for 16 week research internships in universities aims to nurture and develop students' aptitudes towards research in the natural sciences and engineering and encourage them to undertake graduate studies and pursue a research career in these fields. At the postgraduate level, students earn a Master's or Doctoral degree in a domestic and/or foreign institution, after having spent time in an academic and/or industrial setting. The Council also supports the development of innovative training programs that encourage collaborative and integrative approaches, address significant scientific challenges associated to Canada's research priorities, include the acquisition of professional skills, and facilitate the transition of new researchers from trainees to productive employees in the Canadian workforce. Postdoctoral Fellowships provide support to promising Doctoral graduates to further their research training in Canada or abroad. This program uses funding from the following transfer payments: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$81,362,301	$81,359,813	$79,428,271

Human Resources (FTEs)

2015–16	2016–17	2017–18
18	18	18

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Bachelors, Masters and Doctoral students gain research experience in natural sciences and engineering that provides them with a competitive advantage in their careers.	Percentage of student population in the natural sciences and engineering supported (directly or indirectly) by NSERC.	25%	March 31 2016
	Percentage of students supported that are motivated to pursue further studies or training.	20%	
	Percentage of postgraduate students and postdoctoral fellows supported engaged in R&D in their jobs (7 to 9 years after their award).	50%	

Planning Highlights

- In 2015-16, NSERC will develop and implement an action plan to follow-up on the joint evaluation of the Postgraduate Scholarships, Industrial Postgraduate Scholarships, and Collaborative Research and Training Experience programs to assess their effectiveness at meeting their objectives.

Sub-Program 1.1.3: *Alexander Graham Bell Canada Graduate Scholarships*

Description

This Sub Program provides financial support to outstanding eligible scholars pursuing Master's or Doctoral studies in a Canadian university. This program is necessary to ensure a reliable supply of highly qualified personnel to meet the needs of Canada's knowledge economy. Supplementary funding is available in the form of Foreign Study Supplements to select recipients of Canada Graduate Scholarships to build global linkages and international networks through the pursuit of exceptional, short term research experiences at research institutions outside of Canada. This program uses funding from the following transfer payment: Canada Graduate Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$44,012,397	$44,010,275	$43,966,311

Human Resources (FTEs)

2015–16	2016–17	2017–18
10	10	10

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Increased capacity to supply highly qualified personnel to the academic, public and private sectors	Percentage of Canada Graduate Scholarship students supported completing their degree	90%	March 31 2016
	Time to degree completion of doctoral recipients of a Canada Graduate Scholarship	< 6 years	

Planning Highlights

- In 2015-16, NSERC will continue to work with SSHRC and CIHR to plan for a harmonized administration and delivery of the Alexander Graham Bell Canada Graduate Scholarships, focusing specifically on the model and delivery of doctoral awards. This multi-year harmonization is part of a commitment to streamline services across the agencies, reduce duplication of efforts, and minimize the administrative burden for applicants and their institutions.
- The agencies will also develop an action plan to follow up on the evaluation of the Canada Graduate Scholarship Program, to be completed in early 2015.

Sub-Program 1.1.4: *Vanier Canada Graduate Scholarships*

Description

This Sub Program provides financial support to students who have achieved exceptional success in their studies and who demonstrate high potential in the pursuit of a doctoral program in a Canadian university. Both Canadian and international students are eligible for a Vanier Canada Graduate Scholarship. This program is necessary to attract and retain world class doctoral students by supporting students who demonstrate a high standard of scholarly achievement in graduate studies, as well as leadership skills. A high level steering committee, assisted by international review committees, ensures that the best and brightest students are chosen as recipients of the scholarships. Awards allow students to fully concentrate on their studies and work with the best research mentors in their chosen field in Canada. This program uses funding from the following transfer payment: Vanier Canada Graduate Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$8,562,089	$8,561,775	$8,555,265

Human Resources (FTEs)*

2015–16	2016–17	2017–18
1	1	1

*This program is managed by a tri-agency secretariat, led by the Canadian Institutes of Health Research.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Compete worldwide for premier doctoral students to build world-class research capacity in Canada	Expert review of quality of the pool of applicants as measured by percent of fundable applications for a given competition year	40%	March 31 2016
	Number of international students who were awarded a Vanier Canada Graduate Scholarship	50	

Planning Highlights

- In 2015-16, NSERC will work with SSHRC and CIHR to prepare and implement an action plan addressing the results of the formal evaluation of the Vanier Canada Graduate Scholarships.

Sub-Program 1.1.5: *Banting Postdoctoral Fellowships*

Description

This Sub Program supports postdoctoral researchers from Canada and abroad in order to attract the very best postdoctoral fellows to further their training and carry out research in Canada. Up to 25 percent of these awards can be held abroad to allow Canadian postdoctoral fellows the opportunity to gain valuable international experience. This program helps reinforce Canada's standing as a global player in research excellence and higher learning and as a destination of choice for the most gifted students and researchers. The high level of support provided ensures that these fellowships are internationally competitive. Awards provide a two-year stipend to the recipient. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$3,470,385	$3,470,084	$3,463,841

Human Resources (FTEs)*

2015–16	2016–17	2017–18
2	2	2

*This program is managed by a tri-agency secretariat.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Compete worldwide for premier postdoctoral researchers to build world class research capacity in Canada	Expert review of quality of the pool of applicants as measured by percent of fundable applications (for a given competition year)	25%	March 31 2016
	Number of international postdoctoral researchers or equivalent who were awarded a Banting Postdoctoral Fellowship	22	

Planning Highlights

- In 2015-16, NSERC, in collaboration with SSHRC and CIHR, will develop and implement an action plan to follow up on the evaluation of the Banting Postdoctoral Fellowships program.

Sub-Program 1.1.6: *Canada Research Chairs*

Description

This Sub Program provides support to research chairs in the form of salary and research funding to attract and retain some of the world's most accomplished and promising minds. This program assists Canadian universities, together with their affiliated research institutes and hospitals, achieve the highest levels of research excellence and to become world class research centres in today's global, knowledge based economy. Eligible nominees are full professors or associate professors and emerging scholars who may range from recent Doctoral graduates to associate professors. National and international researchers can be chair holders. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$118,211,000	$118,211,000	$118,211,000

Human Resources (FTEs)*

2015–16	2016–17	2017–18
0	0	0

*This program is managed by SSHRC.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
World-class research is enhanced in Canadian universities through the attraction and retention of excellent researchers	Percentage of institutions that found the Canada Research Chair program important or very important in their ability to support the existing research teams/ research clusters/ research centres	90%	March 31 2016

Planning Highlights

- In 2015-16, NSERC will work with the Chairs Secretariat to complete an evaluation of the Canada Research Chairs Program to provide senior management with valid, insightful and actionable findings about the performance and relevance of the program. This will include determining the extent to which the program has met its objectives, along with conclusions and recommendations for future development and improvement.

Sub-Program 1.1.7: *Canada Excellence Research Chairs*

Description

This Sub Program offers eligible Canadian degree granting institutions the opportunity to establish highly remunerated research chairs at their institutions in research areas of strategic importance to Canada, including but not limited to: environmental sciences and technologies; natural resources and energy; health and related life sciences and technologies; and information and communication technologies, including the digital economy. This program is necessary to attract the highest calibre of researchers for Canada's future prosperity. This program uses funding from the following transfer payment: Canada Excellence Research Chairs.

Budgetary Financial Resources (dollars)*

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$25,050,000	$25,200,000	$16,216,667

Human Resources (FTEs)**

2015–16	2016–17	2017–18
0	0	0

*Changes in planned spending reflect the program's peer reviewed competition cycle. Planned spending does not reflect future budget decisions.

**This program is managed by SSHRC.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The attraction of the world's most accomplished researchers to help Canada build a critical mass of expertise in areas of strategic importance to Canada.	Percentage of institutions that have reported significant growth, over the course of the term of the award, in areas of strategic importance to Canada due to CERC award	75%	March 31 2016
	Percentage of Chairs that have provided expert advice/opinion to target end-user groups at a moderate/significant level	75%	

Planning Highlights

- NSERC will continue to support advanced research and the development of researchers through the Canada Excellence Research Chairs. The Chairs Secretariat will continue to implement recommendations from the 2013-14 evaluation of the program, in order to ensure effective operation.

Program 1.2: *Discovery: Advancement of Knowledge*

Description

This Program supports the creation of new knowledge and maintenance of a high quality Canadian broad based research capacity in the natural sciences and engineering through grants to researchers. The advancement of knowledge generated by these grants is necessary to fuel a strong research and innovation system in Canada that is globally competitive. Academic researchers receive funding to carry out research, to support the timely acceleration of research programs, to purchase or develop research equipment, or to facilitate their effective access to major and unique research resources.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$403,233,837	$403,374,332	$402,680,789	$397,795,835

Human Resources (Full-Time Equivalents [FTEs])

2015–16	2016–17	2017–18
59	59	59

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Researchers at Canadian universities advance knowledge in the natural sciences and engineering	Ranking in the per capita output of publications in the natural sciences and engineering vs. G20 countries.	8th	March 31 2016
	Ranking in the number of natural sciences and engineering publications vs. G20 countries.	9th	
	Average relative citation factor of Canadian publications in the natural sciences and engineering vs.G20 countries.	15th	

Planning Highlights

- In 2015-16, NSERC will continue the implementation and work on improvements of the new platform for the delivery of the Discovery Grants and Subatomic Physics elements of the Discovery suite of grants. The coming year will mark the onboarding of the Research Tools and Instruments Grants to the Research Portal, as part of the ongoing process to modernize the systems and processes used to manage all stages of NSERC's grant management business.
- In 2015-16, NSERC will work to enhance its engagement with the research community to ensure that the programs it delivers continue to address the research and training needs of Canada. By enhancing its engagement, NSERC strives to increase its relevance, responsiveness, accountability and transparency to its stakeholders.

Sub-Program 1.2.1: *Discovery Research*

Description

This Sub Program promotes and enables global excellence in discovery research in Canada. NSERC's discovery based grants support long term, ongoing programs of research as well as shorter term research projects. The Council also offers substantial and timely additional resources to select researchers in order to accelerate progress and maximize the impact of their research program. In addition, the Council supports a limited number of large international activities, opportunities, or projects that are of high priority in the context of advanced research in Canada. These are led by world class Canadian researchers and are comprised of teams that will generate substantial impact for the benefit of Canada. Having a solid capacity for basic research across a broad spectrum of natural sciences and engineering disciplines is necessary to ensure that Canada remains at the leading edge of knowledge creation. It ensures that Canada can access and exploit science and technology developments from other countries, and forms the foundation for innovation and the training of the next generation of scientists and engineers. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$389,426,700	$389,412,303	$388,814,778

Human Resources (FTEs)

2015–16	2016–17	2017–18
49	49	49

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The discovery, innovation and training capability of university researchers in natural sciences and engineering is enhanced by the provision of support for on-going programs of basic research.	Percentage of the Discovery Grants program budget spent on early career researchers.	10%	March 31 2016
	Percentage of funds spent on training students and postdoctoral fellows	35%	
	Percentage of Canadian publications in the natural sciences and engineering coauthored with foreign researchers.	40%	

Planning Highlights

- NSERC will continue to optimize its support of discovery research through refinements to its policies and programs. This includes work towards new and enhanced mechanisms designed to increase efficiency and reduce administrative workload. NSERC will explore changes to the method of allocating funds for discovery research in order to ensure that the Program remains effective and that the budget is used responsibly and optimally.
- In 2015-16, NSERC will award grants in the 3rd instalment of *Discovery Frontiers* on the theme New Materials for Clean Energy and Energy Efficiency. This initiative spans a wide range of disciplines including materials physics, chemistry, microbiology and engineering. It will support research in new materials to improve energy production and the efficiency of alternative and conventional energy systems and provide novel solutions to mitigate environmental challenges associated with energy production. It will also cover paradigm-shifting approaches to making molecules and materials with low waste/energy properties; developing methods to examine the persistence and ecotoxicology of high use molecules and seeking replacements for problematic ones leading to cleaner energy production.

Sub-Program 1.2.2: *Research Equipment and Resources*

Description

This Sub-Program supports the purchase or development of research equipment and the maintenance of unique research resources. Funds are also used to facilitate researchers' access to major and unique research resources in Canada and abroad. Grants are awarded through a competitive peer review process. This activity is necessary because, in addition to funds to carry out research, top scientists, and engineers need state of the art equipment and resources to conduct research at world class levels. Access to equipment and resources plays an important role in attracting the best minds to Canada and keeping them here. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)*

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$13,947,632	$13,268,486	$8,981,057

Human Resources (FTEs)

2015–16	2016–17	2017–18
10	10	10

*Planned spending does not reflect transfers from other programs or future budget decisions.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The discovery, innovation and training capability of university researchers in natural sciences and engineering is supported by access to research equipment and major regional or national research facilities	Percentage growth in number of users conducting research at supported facilities.	5%	March 31 2016
	Average number of researchers benefiting from equipment awards.	100	

Planning Highlights

- In 2015-16, through the Research Tools and Instruments Grants, NSERC will continue to foster and enhance the discovery, innovation, and training capability of university research in natural sciences and engineering by supporting the purchase of research equipment and installations that are smaller or smaller in scale than those funded by the Canada Foundation for Innovation.

Program 1.3: *Innovation: Research Partnerships*

Description

This Program fosters partnerships in natural sciences and engineering that facilitates the transfer of knowledge and skills to the user sector through awards that support research projects and network activities intended for socioeconomic impact. The partnerships encouraged and enabled by these awards also increase the commercialization of Canada's research through new products, services, and processes for the benefit of all Canadians.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$371,949,620	$372,473,817	$371,237,543	$367,335,149

Human Resources (Full-Time Equivalents [FTEs])

2015–16	2016–17	2017–18
130	130	130

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Canada builds more research partnerships between businesses, universities and colleges.	Percentage growth in the number of business partners annually.	5%	March 31 2016
	Minimum percentage growth in most of the indicators of knowledge/ technology transfer (new and/or improved products/services, enhanced skills/knowledge of partner personnel, invention disclosures, university spin-offs, university licensing revenue, university R&D contract revenue, university patents).	0.5%	

Planning Highlights

- In 2015-16, NSERC will aim to simplify access for business to the academic community by forming partnerships with other organizations. This includes organizations such as other government departments (e.g. National Research Council, Natural Resources Canada), industry associations (e.g. Consortium for Aerospace Research and Innovation), and non-profit organizations (e.g. Mitacs). This activity will allow businesses to build synergies with Canada's R&D capacity in a more seamless manner.
- In 2015-16, NSERC's Strategy for Partnerships and Innovation will be refreshed following a successful first five years of the strategy. Planning for the renewed strategy will be part of the broader NSERC 2020 strategy with consultation with the business and academic communities. This will be followed by the development of goals and an implementation plan for an anticipated launch by the end of the fiscal year.
- To better measure impacts of NSERC partnered grants, an online reporting system for companies who have participated in NSERC funded projects will be implemented. This initiative will also provide an opportunity to harmonize performance measurement across all of NSERC's partnership grants.

Sub-Program 1.3.1: *Research in Strategic Areas*

Description

This Sub Program supports research projects and activities in selected areas of national importance and in emerging areas that are of potential significance to Canada. This program is necessary to take advantage of Canada's established excellence in research and innovation, and to build capacity in areas that are critical to the Canadian economy. NSERC invests in research areas that have been carefully selected as strategic priorities for the country. These investments support a range of activities such as research projects and networks. Funded activities share the common goal of connecting researchers with end users in order to enable the transfer of knowledge/technology and expertise that increases Canadian prosperity. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)*

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$83,022,069	$77,099,709	$71,389,774

Human Resources (FTEs)

2015–16	2016–17	2017–18
15	15	15

*Financial resources re-allocated to Industry-driven Collaborative Research and Development sub-program.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Research and training in targeted and emerging areas of national importance is accelerated.	Percentage of projects demonstrating knowledge transfer in strategic areas.	50%	March 31 2016
	Number of students and fellows carrying out research in strategic areas.	1500	

Planning Highlights

- Sector Outreach Strategies are being undertaken to better connect sectors of economic importance to Canada with NSERC. To date, strategies have been implemented for the aerospace and mining sectors, and two new strategies were launched for photonics and bioeconomy. In 2015-16 NSERC will also focus on additive manufacturing, which has been identified as a priority in the updated Federal Science, Technology and Innovation Strategy. NSERC has participated in 19 different events with these identified sectors. New Sector Outreach Strategies will be launched in 2015-16.
- Following the update to the Science, Technology and Innovation Strategy, NSERC will realign its Strategic Partnerships grants to the newly identified government priority areas.

Sub-Program 1.3.2: *Industry-driven Collaborative Research and Development*

Description

This Sub Program fosters collaborations between university researchers and industry, as well as other sectors, to develop and transfer new knowledge to Canadian based organizations. It offers a range of industry driven programs that stimulate innovation in the Canadian economy and encourage greater science and technology investment by the private sector. These partnership programs and projects address real world challenges that are relevant to industry, help build sustainable relationships between the two sectors, and connect people and skills. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$160,742,992	$169,542,578	$175,646,493

Human Resources (FTEs)

2015–16	2016–17	2017–18
74	74	74

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Mutually beneficial collaborations between the private sector and researchers in universities result in industrial or economic benefits to Canada.	Percentage growth in total amount of research funds (cash and in-kind) leveraged from industrial partners.	2%	March 31 2016
	Number of students and fellows solving industrial problems through collaboration.	2500	
	Percentage of industrial partners indicating satisfaction with research results.	75%	

Planning Highlights

- In 2015-16, NSERC will aim to increase the impact of its industry-driven program to business innovation. This focus will include the integration of similar grant types and streaming access to research partnership opportunities.

Sub-Program 1.3.3: *Networks of Centres of Excellence*

Description

This Sub Program fosters partnerships among universities, industry, government, and not for profit organizations. This program helps to harness the creativity and inventiveness of the best minds in various disciplines and sectors to find solutions to critical issues of importance to Canada using internationally competitive research, building on multi sectoral partnerships; and, accelerating the use of multidisciplinary research results by organizations that can use them for economic, social, and environmental benefit. The program is jointly administered by the three federal granting agencies through the Network Centres of Excellence Secretariat. The networks supported through this program operate as virtual institutes to carry out research and knowledge/technology transfer activities among the participating organizations. The networks put in place well defined strategies to transfer knowledge to users, ensuring that discoveries and technological advances are turned into social and economic benefits for all Canadians. The networks supported by this activity are designed to develop Canada's economy and improve the quality of life of Canadians. This program uses funding from the following transfer payments: Networks of Centres of Excellence and Business Led Networks of Centres of Excellence.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$41,925,105	$41,556,767	$39,413,782

Human Resources (FTEs)

2015–16	2016–17	2017–18
10	10	10

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Strong linkages and partnerships between university, government and industry, and other users (NGOs) and the research knowledge and technology produced by the networks and centres is transferred and used with economic and societal benefits to Canada.	Percentage of established networks and centres demonstrating knowledge and technology transfer (e.g. number of patents, licenses, copyrights, number of new products or processes, policies created, new capacities established and/or processes or practices affected)	100%	March 31 2016

Planning Highlights

- In 2015-16, the Networks of Centres of Excellence (NCE) program will deliver additional support to networks, including sharing governance best practices, in order to support strong management and governance within these organizations and to improve the efficiency of their reporting on results.
- In 2015-16, the NCE program summative evaluation and ensuing management response will be completed.
- There will be renewal competitions for both the 2011 NCE-Knowledge Mobilization cohort, and the 2012 NCE cohort.
- In response to the NCE program audit, a risk management framework and a strategic planning exercise will be undertaken.

Sub-Program 1.3.4: *Training in Industry*

Description

This Sub Program supports students and recent graduates during short or longer term research internships in Canadian companies. The support allows them to gain Research and Development experience in industry and encourages them to consider careers in industry. Canadian companies benefit from the advanced research skills of these trainees and gain access to new knowledge in their area of activity. The awards are leveraged by the host company, which contributes to the salary of the student or fellow. The program supports an increase in the number of highly qualified people in Canadian industry to strengthen Canadian innovation. This program uses funding from the following transfer payments: Industrial Research and Development Internship Program and Grants and Scholarships.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$22,731,608	$19,830,717	$19,112,256

Human Resources (FTEs)

2015–16	2016–17	2017–18
5	5	5

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Students and fellows gain research experience in an industrial setting	Percentage of Industrial R&D Fellows continuing to work in industry after their fellowship.	50%	March 31 2016
	Percentage of undergraduate students considering an industrial R&D career (after their USRA).	50%	
	Percentage of firms realizing benefits from internships.	75%	

Planning Highlights

- In 2015-16, NSERC will continue administration and payment of ongoing fellowships under the Industrial Research and Development Fellowship Program, as directed in Canada's Economic Action Plan 2014.

Sub-Program 1.3.5: *Commercialization of Research*

Description

This Sub Program supports the development of commercially promising technologies and promotes the transfer of knowledge and technologies to Canadian companies for commercialization. Strengthening Canada's record in commercialization is necessary to achieve business growth, job creation, and a stronger, more resilient economy. By means of grants awarded through competitive peer review processes, the Natural Sciences and Engineering Research Council aims to support the development of pre competitive technologies and to help build the capacity of Canadian universities and colleges to work with industry and fuel economic growth. Federal investments serve to leverage significant amounts of private funding. This program uses funding from the following transfer payments: Grants and Scholarships and the Centres of Excellence for Commercialization and Research.

Budgetary Financial Resources (dollars)*

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$14,193,013	$13,386,283	$11,811,673

Human Resources (FTEs)

2015–16	2016–17	2017–18
10	10	10

*Future competitions not reflected in planned spending.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Pre-competitive development of promising technology and the promotion of its transfer to new or established Canadian companies is facilitated.	Percentage of established centres in which technologies were commercially developed or projects resulting in creation or support of spin-offs, licensing revenue and/or agreements, venture capital funding or patents, copyrights, trademarks, registered industrial designs.	100%	March 31 2016
	Percentage of projects resulting in intellectual property protection (patents, copyrights, trademarks, registered industrial designs).	25%	

Planning Highlights

- In 2015-16, the Centres of Excellence for Commercialization and Research will continue to build on existing infrastructure, networks, and resources to enhance capacity by investing in a portfolio of commercialization centres that will open up new opportunities for Canadian researchers and firms to access world-class equipment, facilities, and business networks.
- A competition was launched for new awards to start in 2015-16 and five existing Centres funded in the 2010 competition are eligible to compete for funding extensions.
- As a result of a pilot exercise in 2014-15, in 2015-16 the Private Sector Advisory Board will begin periodic monitoring of the progress of funded Centres and Business-Led NCEs in order to inform NCE Management and Steering Committees of their performance between competitive evaluation milestones.

Sub-Program 1.3.6: *College and Community Innovation*

Description

This Sub Program increases the capacity of colleges and polytechnics to support innovation at the community and/or regional level. The program design and funding stimulate new partnerships and increased entrepreneurship and assist colleges and polytechnics to take risks and be nimble in developing new ways of working with local businesses and industries to spur innovation and economic growth. This program uses funding from the following transfer payments: College and Community Innovation Program, College University Idea to Innovation, and the Industrial Research Chairs for colleges.

Budgetary Financial Resources (dollars)

2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$49,859,030	$49,821,489	$49,961,171

Human Resources (FTEs)

2015–16	2016–17	2017–18
16	16	16

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Increased capacity of colleges to support innovation at the community and/or regional level.	Percentage growth in number of partnerships with companies and other organizations.	5%	March 31 2016
	Percentage of companies indicating development of new and/or improved products, services, and/or processes.	25%	

Planning Highlights

- In 2015-16, as part of continued efforts to support the rapid growth of college support for business innovation, NSERC will continue to work with colleges on ways to share best practises among colleges, including client services and business processes.
- 2015-16 will see the implementation of the balance of the management response to recommendations from the 2014-15 Audit of the College and Community Innovation program, including a variety of improvements to the program's management.

Internal Services

Description

Internal Services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. These groups are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; Acquisition Services; and Travel and Other Administrative Services. Internal Services include only those activities and resources that apply across an organization and not to those provided specifically to a program.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending
$24,146,513	$23,405,939	$23,371,255	$22,652,868

Human Resources (FTEs)

2015–16	2016–17	2017–18
164	164	164

Planning Highlights

- In 2015-16, NSERC will continue to enhance its business processes by participating in the federal government's shared systems and services initiative, implementing a Systems Application and Products platform, and transitioning to the PeopleSoft platform. NSERC will continue the implementation of a modernized Research Portal Grants Management System by transitioning the application process for its programs to this platform. These initiatives will help improve NSERC's service delivery models for both internal and external clients and reduce administrative costs for researchers.
- In 2015-16, NSERC will continue to support the Government's Open Data initiative. NSERC will be reviewing its data and information resources to increase the number of data sets published in accessible and open formats via federal Open Government websites.

Section III: Supplementary Information

Future-Oriented Statement of Operations

The future-oriented condensed statement of operations provides a general overview of the Natural Sciences and Engineering Research Council's operations. The forecast of financial information on expenses and revenues is prepared on an accrual accounting basis to strengthen accountability and to improve transparency and financial management.

Because the future-oriented condensed statement of operations is prepared on an accrual accounting basis, and the forecast and planned spending amounts presented in other sections of the Report on Plans and Priorities are prepared on an expenditure basis, amounts differ.

A more detailed future-oriented statement of operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, can be found on the Natural Sciences and Engineering Research Council's website[iv].

Future-Oriented Condensed Statement of Operations
For the Year Ended March 31
(dollars)

Financial Information	2014–15 Estimated Results	2015–16 Planned Results	Difference
Total expenses	$1,094,454,116.56	$1,093,411,055.41	$1,043,061.15
Total revenues	-	$178,779.00	$178,779.00
Net cost of operations	$1,094,454,116.56	$1,093,232,276.41	$1,221,840.15

Supplementary Information Tables

The supplementary information tables listed in the *2015–16 Report on Plans and Priorities* can be found on the Natural Sciences and Engineering Research Council's website[v].

- Departmental Sustainable Development Strategy;
- Details on Transfer Payment Programs of $5 Million or More;
- Disclosure of Transfer Payment Programs Under $5 Million;
- Upcoming Internal Audits and Evaluations Over the Next Three Fiscal Years;

Tax Expenditures and Evaluations

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures annually in the *Tax Expenditures and Evaluations*[vi] publication. The tax measures presented in the *Tax Expenditures and Evaluations* publication are the responsibility of the Minister of Finance.

Section IV: Organizational Contact Information

For further information about this report, please contact:

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Appendix: Definitions

appropriation: Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures: Include operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Departmental Performance Report: Reports on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding Reports on Plans and Priorities. These reports are tabled in Parliament in the fall.

full-time equivalent: Is a measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

Government of Canada outcomes: A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

Management, Resources and Results Structure: A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the Strategic Outcome to which they contribute. The Management, Resources and Results Structure is developed from the Program Alignment Architecture.

non-budgetary expenditures: Include net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance: What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve and how well lessons learned have been identified.

performance indicator: A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

performance reporting: The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

planned spending: For Reports on Plans and Priorities (RPPs) and Departmental Performance Reports (DPRs), planned spending refers to those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

plans: The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

priorities: Plans or projects that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome.

program: A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results and that are treated as a budgetary unit.

Program Alignment Architecture: A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome to which they contribute.

Report on Plans and Priorities: Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

results: An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

Strategic Outcome: A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

sunset program: A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target: A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

whole-of-government framework: Maps the financial contributions of federal organizations receiving appropriations by aligning their Programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.

Endnotes

i. Natural Sciences and Engineering Research Act http://laws.justice.gc.ca/eng/acts/N-21/page-1.html#docCont
ii. Whole-of-government framework, http://www.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx
iii. *2015–16 Main Estimates*, http://publiservice.tbs-sct.gc.ca/ems-sgd/esp-pbc/me-bpd-eng.asp
iv Future- Oriented Financial Statements: http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp
v Supplementary Information tables http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp
vi. *Tax Expenditures and Evaluations* publication, http://www.fin.gc.ca/purl/taxexp-eng.asp